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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/740,011	12/20/2000	Kazuyoshi Serizawa	NIT-245	4264
24956	7590	10/04/2005	EXAMINER	
MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C.			NGUYEN, QUANG N	
1800 DIAGONAL ROAD			ART UNIT	
SUITE 370			PAPER NUMBER	
ALEXANDRIA, VA 22314			2141	

DATE MAILED: 10/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/740,011

Applicant(s)

SERIZAWA ET AL.

Examiner

Quang N. Nguyen

Art Unit

2141

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 16-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6,8,9 and 16-18 is/are rejected.
- 7) ☒ Claim(s) 7 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 December 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Detailed Action

1. This Office Action is in response to the Amendment filed on 08/31/2005. Claims 1 and 5-8 have been amended. Claims 10-15 have been cancelled. Claims 16-18 have been added as new claims. Claims 1-9 and 16-18 are presented for examination.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

3. **Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

4. Claim 5 recites the limitation "... wherein said computer node ..." in line 1. There is insufficient antecedent basis for this limitation in the claim (the first one or second one?).

In order to exam the claim, Examiner will assume "said computer node" to be the case of "said second computer node".

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

6. **Claims 1-6, 8-9 and 16-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Beardsley et al. (US 6,304,980), herein after referred as Beardsley.**

7. As to claim 1, Beardsley teaches a computer system as illustrated in Fig. 2, comprising:

a first storage area for storing data records (*primary DASD 206*) (Beardsley, C9: L14-23);

a first processor provided with said first computer node (*the primary site 114 includes a primary host/processor 101 of Fig. 1 or primary host/processor 201 of Fig. 2*) for storing the data records to said first storage area asynchronously with said second computer node with the free time interval (Beardsley, C7: L38-40 and C8:L56 - C9:L20);

a transmitter provided with said first computer node for sending the data records stored in said first storage area (*i.e., a primary storage controller 205 transferring record updates via a primary data mover 204*) (Beardsley, C9: L20-23 and C9:L63 - C10:L13);

a second storage area for storing the data records copied from said first storage area (*secondary DASDs 216*) (Beardsley, C9: L38-43);

a receiver provided with said second computer node and connected to said transmitter via a network for requesting said transmitter to send a record group of the data records stored in said first storage area via said network and designated by a request command sent by said receiver, receiving the record group of the data records from said transmitter via said network and storing the record group of the data records to said second storage area (*collecting record updates by the primary data mover 204 and transmitting those record updates to the second data mover 214 in order to store into the multiple secondary DASDs 216 via multiple secondary storage controllers 215*) (Beardsley, C9: L38-43 and C10: L14-21); and

a second processor (*secondary processor 211*) for designating the record group, to be read from said first storage area by using address information of said first storage area in a free time interval asynchronously with storing executed by said first processor (*i.e., the primary processor 201 transfers data and control information to the secondary*

processor 211 by a communications protocol, for example, a virtual telecommunications access method VTAM communication link 208) and for letting said receiver send the request command to said transmitter, wherein said transmitter reads the record group designated by the request command sent from said receiver and sends the record group to said receiver in response to the request command via said network (i.e., the asynchronous data system 200 encompasses collecting control data from the primary storage controllers 205 so that an order of all data writes to the primary DASDs 206 is preserved and applied to the secondary DASDs 216) (Beardsley, Fig. 2 and C9:L20 – C10:L13).

8. As to claim 2, Beardsley teaches the system of claim 1, wherein said first storage area is allocated within said first computer node (*i.e., primary DASD 104 allocated within primary site 114 of Fig. 1*) (Beardsley, Fig. 1).

9. As to claim 3, Beardsley teaches the system of claim 1, wherein said second storage area is allocated within said second computer node (*i.e., second DASD 107 allocated within secondary site 115 of Fig. 1*) (Beardsley, Fig. 1).

10. As to claim 4, Beardsley teaches the system of claim 1, wherein first storage area is allocated within an external storage device connecting with said first computer node and said second computer node (*i.e., wherein a DASD 206 is an external storage device as illustrated in Fig. 2*) (Beardsley, Fig. 2).

11. As to claim 5, Beardsley teaches the system of claim 1, wherein said second computer node is provided with a timer for starting said second processor with a constant time interval to indicate said receiver to send the request command to said transmitter via said network (*i.e., wherein in the secondary site 231 is similar to the primary site 221 which includes a common sysplex clock 207 to provide a common time reference to all applications running therein*) (Beardsley, C8: L56-67, C9: L1-14 and L24-28).

12. As to claim 6, Beardsley teaches the system of claim 1, wherein said first processor stores each record group of the data records to said first storage area with an identifier number indicating a sequence of storing of the each record group of the data records, said transmitter sends the record group to said receiver in reverse order of the sequence of storing, and said second processor refers to the record group of the data records in said first storage area copied to said second storage area based on the reverse order in order to determine whether the relevant data records are correct or not depending on said identifier number (Beardsley, C13: L54-67 and C14: L1-42).

13. As to claim 8, Beardsley teaches the system of claim 1, wherein said first processor further includes an error checking code generator for generating an error checking code for the record group of the data records to write the record group of the data records and the error checking code to said first storage area (*i.e., if the error is*

permanent, the host ERP stores an error code in a maintenance log to assist in future corrective action) and said second processor checks an error, by use of the error checking code, of the record group of the data records read to said second storage area (i.e., the primary storage controller 103 then queries the secondary storage controller 106 to determine whether the PGID and reserve notification were received, if not, an error condition is issued) (Beardsley, C14: L14-42, C17: L20-39 and C20: L1-49).

14. As to claim 9, Beardsley teaches the system of claim 8, wherein said first storage area includes a plurality of entries for storing a set of said error checking code and the data records to read the data records in the inverse direction to the direction to write the data records to said entry with said first processor (Beardsley, C17: L20-39).

15. Claims 16-18 are corresponding computer system claims of computer system claims 1 and 5-6; therefore, they are rejected under the same rationale.

Allowable Subject Matter

16. Claim 7 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

17. In the remarks, applicant argued in substance that

(A) Prior Art does not teach or suggest “a data receiver of the secondary computer makes a read request to read a set of data records stored in a memory of the primary computer based on an indication from a processor of the secondary computer and sends the read request to a data transmitter of the primary computer”, as claimed.

As to point (A), **Beardsley** teaches an asynchronous disaster recovery system 200 including a primary site 221 and a remote or secondary site 231 as illustrated in Fig. 2, wherein the storage controller (*i.e., one of the secondary storage controllers 215*) of the remote secondary site 231 contains four storage paths 401 connected to an 8x2 switch 402 by an upper channel port 430 and to a plurality of DASDs 216 by a lower device port 432, **wherein the storage path 401 directs the transfer of data records** (*i.e., making the request for data transferring of the data records*) (**Beardsley, C11: L20-33**). In addition to directing the transfer of data, the storage path 401 also **maintains the status of one or more duplex pairs and sets/resets flags within the control blocks to indicate when the secondary DASD 107 needs to be synchronized with the primary DASD 104** (*i.e., designating a record group and requesting to transfer data from one computer to another*) (**Beardsley, C12: L31-62**).

18. Applicant's arguments as well as request for reconsideration filed on 08/31/2005 have been fully considered but they are not deemed to be persuasive.

19. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quang N. Nguyen whose telephone number is (571) 272-3886.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's SPE, Rupal Dharia, can be reached at (571) 272-3880. The fax phone number for the organization is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


RUPAL DHARIA
SUPERVISORY PATENT EXAMINER